REMARKS

The present Amendment amends claim 6, cancels claim 9 and adds new claims 10-12. Therefore, the present application has pending claims 6 and 10-12.

Support for Amendments

The features of claim 9, now canceled, were added to claim 6. Further, support for the remaining amendments to claim 6 are found, for example, in U.S. Patent Application Publication No. 2004/0165587 of the present application ("PG Publication), at paragraph [0038] and Fig. 5; paragraph [0053]; and paragraph [0047] and Fig. 8.

35 U.S.C. §103 Rejections

Claims 6 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,970,930 to Donovan et al. ("Donovan") in view of U. S. Patent Application Publication No. 2002/0145975 to MeLampy et al. ("MeLampy"). As indicated above, claim 9 was canceled. Therefore this rejection regarding claims 9 is rendered moot. Regarding the remaining claim 6, Applicants submit that the features of the present invention, as now more clearly recited in claim 6, are not taught or suggested by Donovan or MeLampy, whether taken individually or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe features of the present invention. Specifically, amendments were made to the claims to more clearly recite that the present invention is directed to a peer-to-peer communication system as recited, for example, in independent claim 6.

The present invention, as recited in claim 6, provides a peer-to-peer communication system. The communication system includes session relay apparatuses which relay session control messages used for peer-to-peer communication between communication terminals. The communication system also includes edge nodes, in a network coupling the communication terminals, accommodating the communication terminals to the network. The communication system further includes a core node which executes a packet relay process in the network.

According to the present invention, a first session relay apparatus receives a session control message from a first communication terminal and a second session relay apparatus receives a session control message from a second communication terminal.

Also according to the present invention, when the first session relay apparatus receives a session establishment request from the first communication terminal as a communication source: the first session relay apparatus transfers the session establishment request to the second session reply apparatus; the second session relay apparatus transfers the session establishment request to the second communication terminal; if the second communication terminal is available to communicate, the second communication terminal transfers a message representing that the communication is available, to the second session relay apparatus; after the second session relay apparatus transfers the message representing that the communication is available, to the first session relay apparatus, the first session relay apparatus generates a packet relay processing policy for a peer-to-peer communication

packet, distributes the policy to a first edge node accommodating the first communication terminal, and causes the first edge node to register the policy, and the second session relay apparatus generates a packet relay process policy to the peer-to-peer communication packet, distributes the policy to a second edge node accommodating the second communication terminal, and causes the second edge node to register the policy to finish a policy setting process to the edge nodes; and the peer-to-peer communication packet from the first communication terminal is set for a next relay node based on the policy in the first edge node to select a network to be relayed.

Furthermore, according to the present invention, if the second session relay apparatus receives a session end request from the second communication terminal: the second session relay apparatus transfers the session end request to the first session relay apparatus; the first session relay apparatus transfers the session end request to the first communication terminal; and after the first communication terminal transfers an OK message to the first session relay apparatus in response to the session end request, the first session relay apparatus causes the first edge node accommodating the first communication terminal to delete the policy distributed to the first edge node and the second session relay apparatus causes the second edge node accommodating the second communication terminal to delete the policy distributed to the second edge node.

Further, according to the present invention, upon receiving a session establishment request, the session relay apparatuses refer to the session establishment request, generate a packet relay processing policy including information for uniquely identifying a session, and manage a packet relay processing

policy per session, and upon receiving an OK message, the session relay apparatuses search a packet relay processing policy based on the information for uniquely identifying the session, and delete the packet relay processing policy related to the received OK message. The prior art does not disclose all of these above-described features.

The above-described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Donovan or MeLampy, whether taken individually or in combination with each other.

Donovan teaches a method and system of providing differentiated services. However, there is no teaching or suggestion in Donovan of the peer-to-peer communication system as recited in claim 6 of the present invention.

Donovan discloses a method for combining Internet protocols in a Differentiated Services model environment. The Session Initiation Protocol (SIP) and Common Open Policy Service (COPS) are combined together to provide methods of setting up a session and tearing down a session, while maintaining Authentication, Authorization, and Accounting (AAA) policies. The Open Settlement Policy (OSP) is also combined with SIP and COPS. This combination provides for an interchange of parameters between session setup, teardown, authorization, policy, Quality of Service (QoS), and usage reporting.

One feature of the present invention, as recited in claim 6, includes where upon receiving a session establishment request, the session relay apparatuses refer to the session establishment request, generate a packet relay processing policy including information for uniquely identifying a session, and manage a packet relay processing policy per session, and where upon receiving an OK message, the

session relay apparatuses search a packet relay processing policy based on the information for uniquely identifying the session, and delete the packet relay processing policy related to the received OK message. Donovan does not disclose this feature.

In the present invention, a session relay apparatus manages a policy, per session, for controlling a peer-to-peer communication. Therefore, even when there is a plurality of sessions established between a pair of communication terminals, a policy can be individually established and released. Thus, even when the same communication terminals communicate, a different routing path can also be selected for each service per session.

Donovan does not teach or suggest these features. For example, Donovan does not teach or suggest managing of the policy per session. Accordingly, Donovan does not teach or suggest where a plurality of sessions are established and released between a pair of communication terminals, as in the present invention.

Therefore, Donovan fails to teach or suggest "wherein upon receiving a session establishment request, the session relay apparatuses refer to the session establishment request, generate a packet relay processing policy including information for uniquely identifying a session, and manage a packet relay processing policy per session, and wherein upon receiving an OK message, the session relay apparatuses search a packet relay processing policy based on the information for uniquely identifying the session, and delete the packet relay processing policy related to the received OK message" as recited in claim 6.

The above noted deficiencies of Donovan are not supplied by any of the other references of record, namely MeLampy, whether taken individually or in combination

with each other. Therefore, combining the teachings of Donovan and MeLampy in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

MeLampy teaches a system and method for assisting in controlling real-time transport protocol flow through multiple networks via use of a cluster of session routers. However, there is no teaching or suggestion in MeLampy of the peer-to-peer communication system as recited in claim 6 of the present invention.

MeLampy discloses a system for assisting in controlling real-time transport protocol flow through multiple networks via use of a cluster of session routers. The system uses a first computer and a cluster of computers, where the cluster of computers includes at least two associated computers that are connected to the first computer. Each of the associated computers include a second transceiver, a second memory having logic stored therein defining functions to be performed by the associated computers, and a second processor. The second processor is configured by the second memory to perform an inbound screen on route information received by an associated computer, from the first computer, to determine if the received route information should be discarded. If the route information is not discarded, the second processor is configured to compare the received and screened route information to a local policy defined within the cluster of computers. The second processor is also configured to perform an outbound screen on the received and screened information prior to transmitting the received and screened information outside the cluster of computers.

One feature of the present invention, as recited in claim 6, includes where upon receiving a session establishment request, the session relay apparatuses refer to the session establishment request, generate a packet relay processing policy

including information for uniquely identifying a session, and manage a packet relay processing policy per session, and where upon receiving an OK message, the session relay apparatuses search a packet relay processing policy based on the information for uniquely identifying the session, and delete the packet relay processing policy related to the received OK message. MeLampy does not disclose this feature.

As previously discussed, in the present invention, a session relay apparatus manages a policy, per session, for controlling a peer-to-peer communication. Therefore, even when there is a plurality of sessions established between a pair of communication terminals, a policy can be individually established and released. Thus, even when the same communication terminals communicate, a different routing path can also be selected for each service per session.

MeLampy does not teach or suggest these features. For example, MeLampy does not teach or suggest managing of the policy per session. Accordingly, MeLampy does not teach or suggest where a plurality of sessions are established and released between a pair of communication terminals, as in the present invention.

Therefore, MeLampy fails to teach or suggest "wherein upon receiving a session establishment request, the session relay apparatuses refer to the session establishment request, generate a packet relay processing policy including information for uniquely identifying a session, and manage a packet relay processing policy per session, and wherein upon receiving an OK message, the session relay apparatuses search a packet relay processing policy based on the information for uniquely identifying the session, and delete the packet relay processing policy related to the received OK message" as recited in claim 6.

Both Donovan and MeLampy suffer from the same deficiencies, relative to the features of the present invention, as recited in the claims. Therefore, combining the teachings of Donovan and MeLampy in the manner suggested by the Examiner does not render obvious the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claim 6 as being unpatentable over Donovan in view of MeLampy are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claim 6.

New Claims 10-12

Claims 10-12 were added to more clearly describe features of the present invention. Claims 10-12 are dependent on claim 6. Therefore, claims 10-12 are allowable for at least the same reasons previously discussed regarding claim 6.

In view of the foregoing amendments and remarks, Applicants submit that claims 6 and 10-12 are in condition for allowance. Accordingly, early allowance of claims 6 and 10-12 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (referencing Attorney Docket No. 500.43229X00).

Respectfully submitted,

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